

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		10562512
	Filing Date		2005-12-28
	First Named Inventor	Ben Hankamer	
	Art Unit	1645	
	Examiner Name	Not yet assigned	
Attorney Docket Number		012930-000026	

U.S. PATENTS						Remove
Examiner Initial*	Cite No	Patent Number	Kind Code ¹	Issue Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear
	1					

If you wish to add additional U.S. Patent citation information please click the Add button. [Add](#)

U.S. PATENT APPLICATION PUBLICATIONS						Remove
Examiner Initial*	Cite No	Publication Number	Kind Code ¹	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear
	1					

If you wish to add additional U.S. Published Application citation information please click the Add button. [Add](#)

FOREIGN PATENT DOCUMENTS								Remove
Examiner Initial*	Cite No	Foreign Document Number ³	Country Code ² j	Kind Code ⁴	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear	Ts
	1							<input type="checkbox"/>

If you wish to add additional Foreign Patent Document citation information please click the Add button. [Add](#)

NON-PATENT LITERATURE DOCUMENTS			Remove
Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, page(s), volume-issue number(s), publisher, city and/or country where published.	Ts

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number	10562512
Filing Date	2005-12-28
First Named Inventor	Ben Hankamer
Art Unit	1645
Examiner Name	Not yet assigned
Attorney Docket Number	012930-000026

1	ALLEN et al., "Chloroplasat Protein Phosphorylation Couples Plastoquinone Redox State to Distribution of Excitation Energy Between Photosystems," Nature, Vol. 297, (7 May 1981) pp. 25-29.	<input type="checkbox"/>
2	BONAVENTURE et al., "Fluorescence and Oxygen Evolution from Chlorella Pyrenoidosa," Biochimica et Biophysica Acta, Vol. 189, (1969) pp. 366-383.	<input type="checkbox"/>
3	BULTE et al., "ATP Control on State Transitions in vivo in Chlamydomonas Reinhardtii," Biochimica et Biophysica Acta, Vol. 1020, (1990) pp. 72-80.	<input type="checkbox"/>
4	DAGA et al., "Molecular Characterization of the Transcription Termination Factor from Human Mitochondria," The Journal of Biological Chemistry, Vol. 268, No. 11, (April 15, 1993) pp. 8123-8130.	<input type="checkbox"/>
5	DAY et al., "A Transposon with an Unusual Arrangement of Long Terminal Repeats in the Green Alga Chlamydomonas Reinhardtii," The EMBO Journal., Vol. 7, No. 7, (1988) pp. 1917-1927.	<input type="checkbox"/>
6	DE VITRY et al., "Analysis of the Nucleus-Encoded and Chloroplast-Targeted Rieske Protein by Classic and Site-Directed Mutagenesis of Chlamydomonas," The Plant Cell, Vol. 11, (October 1999) pp. 2031-2044.	<input type="checkbox"/>
7	DEBUCHY et al., "The Argininosuccinate Lyase Gene of Chlamydomonas Reinhardtii: An Important Tool for Nuclear Transformation and for Correlating the Genetic and Molecular Maps of the ARG7 Locus," The EMBO Journal, Vol. 8, No. 10, (1989) pp. 2803-2809.	<input type="checkbox"/>
8	DEPEGE et al., "Role of Chloroplast Protein Kinase Stt7 in LHClI Phosphorylation and State Transition in Chlamydomonas," Science, Vol. 299, (7 March 2003) pp. 1572-1575.	<input type="checkbox"/>
9	DUBY et al., "Alteration of Dark Respiration and Reduction of Phototrophic Growth in a Mitochondrial DNA Deletion Mutant of Chlamydomonas Lacking cob, nd4 and the 3' End of nd5," The Plant Cell, Vol. 11, (January 1999) pp. 115-125.	<input type="checkbox"/>
10	DUTILLEUL et al., "Functional Mitochondrial Complex I is Required by Tobacco Leaves for Optimal Photosynthetic Performance in Photorespiratory Conditions and During Transients," Plant Physiology, Vol. 131, (January 2003) pp. 264-275.	<input type="checkbox"/>
11	FERNANDEZ-SILVA et al., "The Human Mitochondrial Transcription Termination Factor (mTERF) is a Multizipper Protein but Binds to DNA as a Monomer, with Evidence Pointing to Intramolecular Leucine Zipper Interactions," The EMBO Journal, Vol. 16, No. 5, (1997) pp. 1066-1079.	<input type="checkbox"/>

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number	10562512
Filing Date	2005-12-28
First Named Inventor	Ben Hankamer
Art Unit	1645
Examiner Name	Not yet assigned
Attorney Docket Number	012930-000026

12	FINAZZI et al., "Involvement of State Transitions in the Switch Between Linear and Cyclic Electron Flow in <i>Chlamydomonas Reinhardtii</i> ," EMBO Reports, Vol. 3, No. 3, (2002) pp. 280-285.	<input type="checkbox"/>
13	FINAZZI et al., "Thylakoid Targeting of Tat Passenger Proteins Shows no Aph Dependence in Vivo," The EMBO Journal, Vol. 22, No. 4, (2003) pp. 807-815.	<input type="checkbox"/>
14	FLEISCHMANN et al., "Isolation and Characterization of Photoautotrophic Mutants of <i>Chlamydomonas Reinhardtii</i> Deficient in State Transition," The Journal of Biological Chemistry, Vol. 274, No. 43, (October 22, 1999) pp. 30987-30994.	<input type="checkbox"/>
15	FLORIN et al., "A Novel Type of Iron Hydrogenase in the Green Alga <i>Scenedesmus Obliquus</i> is Linked to the Photosynthetic Electron Transport Chain," The Journal of Biological Chemistry, Vol. 276, No. 9, (March 2, 2001) pp. 6125-6132.	<input type="checkbox"/>
16	FLUGGE, "Metabolite Transporters in Plastids," Plant Biology, Vol. 1, (1998) pp. 201-206.	<input type="checkbox"/>
17	GANS et al., "The Effect of Cyanide on State Transition in <i>Chlamydomonas Reinhardtii</i> ," Biochimica et Biophysica Acta, Vol. 1228, (1995) pp. 51-57.	<input type="checkbox"/>
18	GHIRARDI et al., "Oxygen Sensitivity of Algal H ₂ -Production," Applied Biochemistry and Biotechnology, Vol. 63-65, (1997) pp. 141-151.	<input type="checkbox"/>
19	GHIRARDI et al., "Microalgae: A Green Source of Renewable H ₂ ," Tibtech, Vol. 18, (December 2000) pp. 506-511.	<input type="checkbox"/>
20	GRAY et al., "Organization and Expression of Algal (<i>Chlamydomonas Reinhardtii</i>) Mitochondrial DNA," Biological Sciences, Vol. 319, No. 1193 (May 31, 1998) pp. 135-147.	<input type="checkbox"/>
21	GU et al., "Analysis of Leaf Sectors in the NCS6 Mitochondrial Mutant of Maize," The Plant Cell, Vol. 5, (August 1993) pp. 963-971.	<input type="checkbox"/>
22	GUMPEL et al., "Playing Tag with <i>Chlamydomonas</i> ," Trends in Cell Biology, Vol. 4, (August 1994) pp. 299-301.	<input type="checkbox"/>

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number	10562512
Filing Date	2005-12-28
First Named Inventor	Ben Hankamer
Art Unit	1645
Examiner Name	Not yet assigned
Attorney Docket Number	012930-000026

23	HAPPE et al., "Differential Regulation of the Fe-Hydrogenase During Anaerobic Adaptation in the Green Alga Chlamydomonas Reinhardtii," Eur. J. Biochem., Vol. 269, (2002) pp. 1022-1032.	<input type="checkbox"/>
24	HELDT et al., "Alkalization of the Chloroplast Stroma Caused by Light-Dependent Proton Flux into the Thylakoid Space," Biochimica et Biophysica Acta, Vol. 314, (1973) pp. 224-241.	<input type="checkbox"/>
25	HESS et al., "Impairment of the Mitochondrial Transcription Termination by a Point Mutation Associated with the MELAS Subgroup of Mitochondrial Encephalomyopathies," Nature, Vol. 351, (16 May 1991) pp. 236-239.	<input type="checkbox"/>
26	HOEFNAGEL et al., "Interdependence Between Chloroplasts and Mitochondria in the Light and the Dark," Biochimica et Biophysica Acta, Vol. 1366, (1998) pp. 235-255.	<input type="checkbox"/>
27	HOFFERT et al., "Energy Implications of Future Stabilization of Atmospheric CO2 Content," Nature, Vol. 395, (29 October 1998) pp. 881-884.	<input type="checkbox"/>
28	HORTON et al., "Regulation of Phosphorylation of Chloroplast Membrane Polypeptides by the Redox State of Plastoquinone," FEBS Letters, Vol. 125, No. 2, (March 1981) pp. 193-196.	<input type="checkbox"/>
29	HUSIC et al., "Inhibition of Glycolate and D-Lactate Metabolism in a Chlamydomonas Reinhardtii Mutant Deficient in Mitochondrial Respiration," Proc. Natl. Acad. Sci. USA, Vol. 84, (March 1987) pp. 1555-1559.	<input type="checkbox"/>
30	KINDLE et al., "Stable Nuclear Transformation of Chlamydomonas Using the Chlamydomonas Gene for Nitrate Reductase," The Journal of Cell Biology, Vol. 109, No. 6, Pt. 1, (December 1989) pp. 2589-2601.	<input type="checkbox"/>
31	KROMER et al., "Mitochondrial Oxidative Phosphorylation Participating in Photosynthetic Metabolism of a Leaf Cell," FEB, Vol. 226, No. 2, (January 1988) pp. 352-356.	<input type="checkbox"/>
32	KROMER et al., "On the Role of Mitochondrial Oxidative Phosphorylation in Photosynthesis Metabolism as Studied by the Effect of Oligomycin on Photosynthesis in Protoplasts and Leaves of Barley (Hordeum Vulgare)," Plant Physiol., Vol. 95, (1991) pp. 1270-1276.	<input type="checkbox"/>
33	KRUSE, "Light-Induced Short-Term Adaptation Mechanisms Under Redox Control in the PS II-LHCII Supercomplex: LHC II State Transitions and PS II Repair Cycle," Naturwissenschaften, Vol. 88, (2001) pp. 284-292.	<input type="checkbox"/>

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number	10562512
Filing Date	2005-12-28
First Named Inventor	Ben Hankamer
Art Unit	1645
Examiner Name	Not yet assigned
Attorney Docket Number	012930-000026

34	KRUSE et al., "Termination of Transcription in Human Mitochondria: Identification and Purification of a DNA Binding Protein Factor that Promotes Termination," Cell, Vol. 58, (July 28, 1989) pp. 391-397.	<input type="checkbox"/>
35	KRUSE et al., "Isolation of State Transition Mutants of Chlamydomonas Reinhardtii by Fluorescence Video Imaging," Photosynthesis Research, Vol. 61, (1999) pp. 43-51.	<input type="checkbox"/>
36	LEE et al., "A New Oxygen Sensitivity and Its Potential Application in Photosynthetic H ₂ Production," Applied Biochemistry and Biotechnology, Vol. 105-106, (2003) pp. 303-313.	<input type="checkbox"/>
37	LEMAIRE et al., "Characterization of Thioredoxin γ, A New Type of Thioredoxin Identified in the Genome of Chlamydomonas Reinhardtii," FEBS Letters, Vol. 543, (2003) pp. 87-92.	<input type="checkbox"/>
38	LOWN et al., "Chlamydomonas Nuclear Mutants that Fail to Assemble Respiratory or Photosynthetic Electron Transfer Complexes," Biochemical Society Transactions, Vol. 29, Pt. 4, (2001) pp. 452-455.	<input type="checkbox"/>
39	MELIS et al., "Hydrogen Production. Green Algae as a Source of Energy," Plant Physiology, Vol. 127, (November 2001) pp. 740-748.	<input type="checkbox"/>
40	MELIS et al., "Sustained Photobiological Hydrogen Gas Production upon Reversible Inactivation of Oxygen Evolution in the Green Alga Chlamydomonas Reinhardtii," Plant Physiology, Vol. 122, (January 2000) pp. 127-135.	<input type="checkbox"/>
41	MICHEL et al., "Molecular Characterization of <i>idjA</i> and Adjacent Genes in the Cyanobacteria <i>Synechococcus</i> sp. Strains PCC 6301 and PCC 7942," Microbiology, Vol. 145, (1999) pp. 1473-1484.	<input type="checkbox"/>
42	MILLENAAR et al., "The Role of the Alternative Oxidase in Stabilizing the in vivo Reduction State of the Ubiquinone Pool and the Activation State of the Alternative Oxidase," Plant Physiol., Vol. 118, (1998) pp. 599-607.	<input type="checkbox"/>
43	MURATA, "Control of Excitation Transfer in Photosynthesis," Biochimica et Biophysica Acta, Vol. 172, (1969) pp. 242-251.	<input type="checkbox"/>
44	"National Hydrogen Energy Roadmap," United States Department of Energy, National Hydrogen Energy Roadmap Workshop, Washington, DC, (April 2-3, 2002) pp. 1-58.	<input type="checkbox"/>

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number	10562512
Filing Date	2005-12-28
First Named Inventor	Ben Hankamer
Art Unit	1645
Examiner Name	Not yet assigned
Attorney Docket Number	012930-000026

45	NELSON et al., "The CRY1 Gene in Chlamydomonas Reinhardtii: Structure and Use as a Dominant Selectable Marker for Nuclear Transformation," Molecular and Cellular Biology, Vol. 14, No. 6, (June 1994) pp. 4011-4019.	<input type="checkbox"/>
----	---	--------------------------

If you wish to add additional non-patent literature document citation information please click the Add button

EXAMINER SIGNATURE

Examiner Signature	Date Considered
--------------------	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. ² Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). ³ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁴ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁵ Applicant is to place a check mark here if English language translation is attached.

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number	10562512
Filing Date	2005-12-28
First Named Inventor	Ben Hankamer
Art Unit	1645
Examiner Name	Not yet assigned
Attorney Docket Number	012930-000026

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

☐ That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

- ☐ See attached certification statement.
- ☐ Fee set forth in 37 CFR 1.17 (p) has been submitted herewith.
- ☒ None

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Jennifer L. Skord/	Date (YYYY-MM-DD)	2007-03-01
Name/Print	Jennifer L. Skord	Registration Number	30,687

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these records.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.